

REMARKS/ARGUMENTS

The final Office Action of January 11, 2007, has been reviewed and these remarks are responsive thereto. Claim 44 has been amended. Reconsideration and allowance of the application are respectfully requested.

Allowable Subject Matter

Applicants thank the Examiner for indicating allowable subject matter with respect to claims 55, 56, 62 and 63.

Claim Rejections Under 35 U.S.C. §112

Claim 44 stands rejected under 35 U.S.C. §112 for reciting the feature of “the SSL client handshake” in line 7 without sufficient antecedent basis. Applicants have amended claim 44 and thus respectfully traverse this rejection.

Claim Rejections Under 35 U.S.C. §103

Claims 28-31, 34-36, 39, 40 and 42-54, 57, 59-61 and 64 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Aziz *et al.* (U.S. Patent No. 6,643,701, “Aziz”) in view of Bruck *et al.* (U.S. Patent No. 6,691,165, hereinafter “Bruck”). This rejection is respectfully traversed for at least the following reasons.

Independent claims 28, 46 and 49 relate to, *inter alia*, an SSL relay establishing a connection between a first node and a second node, wherein the connection includes an SSL connection between the SSL relay and the first node, and clustering state information of the communication path, the clustering comprising sharing the state information between the first SSL relay and at least a second SSL relay of the cluster. Contrary to the Office Action’s contentions, there is no motivation to combine Aziz and Bruck in the manner asserted. Aziz generally relates to a method and system for providing secure communications with a relay in a network. Aziz, Title. In particular, Aziz describes providing a connection between a first computer and a second computer by receiving, at a third computer, information regarding one of the first and second computers to facilitate establishment of a secure connection between the first and second computers. Aziz, Abstract. Aziz further discloses that an end-to-end security link

may be established using SSL. The Office Action concedes that Aziz does not explicitly teach of connecting at least two relays in a cluster and clustering state information of the communication path when the record has been acknowledged by the second node. In fact, Aziz does not teach or suggest any form of clustering. To cure these deficiencies, the Office Action relies on Bruck, alleging that one would be motivated to combine Aziz and Bruck because Aziz teaches that more than one relay can be employed to expand the number of connections. Applicants respectfully disagree. The mere fact that Aziz describes more than one relay does not teach or suggest a need for clustering. Significantly, the more than one relay described by Aziz are provided to expand the number of connections. Col. 6, ll. 1-2. Nowhere does Aziz teach or suggest a need to cluster the more than one relay or for a first relay to take over the connection of a second relay. In addition, even if, without admitting, Aziz taught or suggested a need for clustering, Bruck relates to clustering TCP protocol connections, not SSL connections. Accordingly, one of ordinary skill in the art would not have been motivated to combine Aziz and Bruck in the manner suggested for at least these reasons. Claims 28, 46, 49 and all claims dependent thereon are allowable for at least these reasons.

Furthermore, even if Aziz and Bruck are properly combinable, neither Aziz nor Bruck teach or suggests the features of an SSL relay establishing a connection between a first node and a second node and clustering state information of the communication path *when the record has been acknowledged by the second node*, as recited in claims 28, 46 and 49. The Office Action concedes Aziz fails to teach or suggest such a feature at p. 4. To cure this deficiency, the Office Action relies on col. 25, line 58 – col. 26, line 6 of Bruck. The cited passage of Bruck discloses that “TCP/IP connections between two machines are established following an exchange of messages including a synchronize segment message (SYN), acknowledgement message (ACK), and SYN-acknowledgement message (SYN-ACK).” However, Bruck is merely describing the exchange of synchronization acknowledgments between servers in a relay cluster (i.e., Server 1 and Server 2), not acknowledgment of a record from a second node that is connected to a first node through an SSL relay, as recited in claims 28, 46 and 49. Claims 28, 46 and 49 are thus allowable for this additional reason.

Amended independent claim 44 recites, *inter alia*,

“an SSL relay cluster for connecting the first node and the second node comprising: a first SSL relay configured to cluster an SSL client handshake following reception of the SSL client handshake from the first node; and a second SSL relay configured to transmit an acknowledgment to the first SSL relay after receiving update information from the first SSL relay, wherein the first SSL relay is further configured to transmit a handshake acknowledgment message to the first node following reception of the acknowledgment from the second SSL relay.”

As discussed with respect to claims 28, 46 and 49, there is no motivation to combine Aziz and Bruck. In addition, nowhere does Aziz or Bruck, either separately or in combination, teach or suggest a second SSL relay configured to transmit an acknowledgment to the first SSL relay after receiving update information from the first SSL relay, wherein the first SSL relay is further configured to transmit a handshake acknowledgment message to the first node following reception of the acknowledgment from the second SSL relay. To cure this admitted deficiency of Aziz, the Office Action cites col. 27, ll. 12-15 of Bruck. The cited passage discloses a server (i.e., distributed gateway) buffering a data packet until SYN updates are received from other gateways. Even so, nowhere does Bruck teach or suggest transmitting a handshake acknowledgment message to a first node following reception of the acknowledgment from the second SSL relay. Even assuming, without conceding, that Bruck's SYN updates constitute acknowledgments from a second relay, there is still no teaching or suggestion, in Bruck, of transmitting a *handshake acknowledgment message* to a first node following reception of the acknowledgment from the second relay, as recited in claim 44. Accordingly, claim 44 is allowable for at least these reasons.

Claims 29-31, 34-36, 39, 40 and 42, 43, 45, 47, 48, 50-57 and 60-64 are dependent on independent claims 28, 44, 46 and 49, respectively, and are thus allowable for at least the same reasons as their base independent claims and further in view of the novel and non-obvious features recited therein. For example, claim 34 recites, *inter alia*, “sharing an SSL session cache across all of the at least two SSL relays.” The Office Action concedes that Aziz does not teach or suggest such features. Instead, the Office Action relies on col. 16, line 66 to col. 17, line 6 of Bruck to cure these deficiencies. However, the cited passage merely describes an ARP cache, not an SSL session cache. Further, the ARP cache is not a shared cache; rather, each client and

router on the subnet has their own respective ARP cache. Col. 17, ll. 6-10. As such, claim 34 is allowable for this additional reason.

Claims 37, 38, 41, 58 and 61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Aziz in view of Bruck and further in view of Weinstein *et al.* (U.S. Patent No. 6,094,485, hereinafter “Weinstein”). This rejection is respectfully traversed for the following reasons.

Claims 37, 38 and 41 are dependent on claim 28 and thus are allowable over Aziz and Bruck for at least the same reasons as discussed above. Claims 37, 38 and 41 are further allowable over the asserted combination of Aziz, Bruck and Weinstein since Weinstein fails to cure the deficiencies of Aziz and Bruck identified above. Still further, there would be no motivation to combine Weinstein with Bruck since Weinstein does not teach or suggest a need or desire to cluster state information of SSL communications between a first node and a second node through a relay. As such, one of ordinary skill in the art would not have been motivated to combine the features of SSL protocol disclosed in Weinstein with the TCP clustering system described in Bruck since doing so would be superfluous. Claims 37, 38 and 41 are thus allowable for at least this reason.

CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. However, if for any reason the Examiner believes the application is not in condition for allowance or there are any questions, the examiner is requested to contact the undersigned at (202) 824-3156.

Respectfully submitted,

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